Introduction
I. INTRODUCTION

India is predominately an agricultural country and its economic developments are built on the foundation of the agricultural development. Indian agriculture is in the process of transformation from age-old subsistence farming to a more modern method. This is especially true with the recent advances in agriculture during last decades. To accelerate the process of development, effective communication of scientific innovation to the farmers who are the ultimate users of these technologies is very essential. Less importance is given to the feedback of the farmers' problems to research centers. It is with this intention that a series of communication strategies were outlined and implemented in the country since independence, starting from Community Development Programmes in 1952, which was initiated after independence in order to boost agricultural production through technology transfer by way of communication to the farmers for adoption of latest varieties.

Communication is considered as an art and is one of the most complex processes especially in view of its importance for development, where the
communication medium is as important factor as that message and other elements of communication process.

In bringing an effective communication, the communication channel and the message play significant roles. Communicators by and large are not the creators of messages but they are, at the best, processors of message in such way that the people and the organizations can easily accept them. They act as transmission link between extension workers on one hand and on other hand as organization people. Hence, it is extremely important for communicators to be in constant way of communication with each other so that the benefits of scientific research will be used frequently by the people for their upliftment and to improve economic conditions.

While analyzing the reasons for this gap, many researchers have indicated constraints within and outside the extension system such as lack of location in spreading the specific technology and coordination among the development agencies, linkages between systems operating for agricultural development, incompetence and lack of initiative on the part of extension workers, non responsive nature of clients due to illiteracy etc. Right form the inception of Community Development Programme in India (1952), the
village level workers were given a key role in the dissemination of new farm technology to farming community. The programme evaluation organization (1957) observed that the role of this functionary as a change agent is a friend, philosopher and as a guide to farmers and people toquire more role in basic agricultural development work. Thus the village level extension workers at field level assumes a great responsibility for communication of new agricultural innovations and occupies a strategic position in the network of agricultural information dissemination system in the area of operation as a primary link between the extension system and client system.

Several research studies conducted in the past in the area of transfer of technology revealed that field and middle level extension workers as important sources of information to farmers. Jalihal (1960) reported that extension agent was the most important source next to mass media in disseminating new ideas to farmers. In many other studies extension personnel topped the list as the most important credible source among the farmers. Even now in the days of media explosion, the importance of grassroot level extension workers has not been reduced. Though less educated than the other extension personnel in the chain of hierarchy, his role is no less professional and specialized. He is the basic extension worker
who teaches production techniques to farmers. The work of all other extension functionaries in the system is to make the village level extension worker more effective in his job. The role of village level worker is frequently trusted since of all extension functionaries, his function is not only persuading farmers to adopt production recommendations but also giving feedback to the extension research systems regarding information on actual farming, production conditions, constrains and farmers reaction to recommended practices. But doubts are being raised about information in the wake of recent technological breakthrough in agriculture. This has necessitated him not only to keep abreast of the recent advances in agricultural technology but also to introduce more competent as a communicator of improved agricultural technology.

With the implementation of the Training and Visit system of extension, intensive efforts have been made to improve the job competence of extension personnel especially grassroot level extension workers through regular training programmes. Even under the new set up of extension the communication behavior of field level workers was found to be unsatisfactory. Hence, there is need to further analyze the level of communication competence of the field level extension workers in order to
find out their level of understanding, how much improvement is required to bring them up to required system. Such information about the field workers who would help efficiency, how improvements can be assessed in efficiency level that could be brought in the communication. The extension administrators to chalk out need based training programmes to improve the communication abilities of the grassroot level extension workers in sugar industries already in service and select efficient personnel for the job. Efficiency in communication has always been a matter of concern in all walks of life and more so for agricultural development. The process of modernizing agriculture involves three basic approaches like ‘Research,’ and the ‘Extension’ with ‘Client System’. Each of these systems is equally important and plays significant role in the process of modernizing agriculture by way of communication system.

Statement of the problem:

India is the native place of sugarcane. It is a cash crop and has large area under cultivation. About 40 million farmers are engaged in sugarcane cultivation in 4.25 million hectares of land. Though sugarcane occupies only 2 per cent of the total cultivable area, it contributes about 8 per cent of the total value of agricultural output. The sugar industry is the largest among the
processing industries in the country, next to textiles. Geographically, Karnataka is well suited for growing sugarcane. It occupies an area of 2.08 lack hectares with a total production of 28 million tones during 2005-06. (Indian Sugar Journal Vo.No.LVI No. Ten)

In this context, the role of extension workers working in sugar industries is very important as they have direct contact with the sugarcane cultivators. In every sugar industry, there will be an agricultural department with its employees at three levels: Management level at the factory, Middle level where employees will cover a cluster of 20-25 villages and at Field level where the employees will cover 3-4 villages. The middle and field level workers are the grassroots level workers who are in constant interlink with the sugarcane growers. They are constantly involved in variety of communication activities. The competence with which they are performing the task of communication decides the effectiveness of sugarcane development in that area. The communication efficiency of extension workers is vital as it affects their performance. Communication also plays a significant role in the diffusion of new technology. The usage of scientific technologies needs to be imparted to the employees. The effectiveness of communication methods in terms of gaining knowledge differs from one
person to another, one set of audience to another and even from one practice to another. It is imperative that suitable extension teaching methods are properly selected and utilized for transferring the knowledge of sugarcane technology. In India, sufficient technology is available, which is important that the technology developed is communicated and transferred effectively and efficiently to the actual users in time so that they can use these developed techniques on their own farms to increase their sugarcane yield. Therefore, there is need to develop an instrument that can measure communication efficiency of extension workers. Keeping in view the importance of communication, a study was undertaken to know the communication efficiency and pattern of extension workers working in sugar industries.

**Objectives of the study:**

The general objective of the study is to know the communication efficiency of the extension workers working in sugar industries. More specifically, the present study is designed with the following objectives.

1. To study the communication efficiency of extension workers in sugar industries.
2. To assess the significant difference between agricultural graduates and non-agricultural graduates working in private and co-operative sugar industries as extension workers with respect to their communication efficiency with independent variables.

3. To examine the significant difference between position, age and qualification of agricultural and non-agricultural graduates working in private and co-operative sugar industries as extension workers with respect to dependent and independent variables.

4. To understand the relationship between communication efficiency with independent variables of agricultural and non-agricultural graduates working in private and co-operative sugar industries.

5. To analyze significant assumption of communication efficiency with agricultural and non-agricultural graduates working in private and cooperative sugar industries.

6. To study the socio-economic characters of agricultural and non-agricultural graduates in private and co-operative sugar industries.
Scope of the study:

There are various studies in the field of communication, which have examined the communication behavior. Only few studies looked into the efficiency of the pattern. Specifically, there has been no study conducted in the field of sugar industries in Karnataka. Thus, the present study is a pioneer study in this field, which will provide an insight into different dimensions of the communication pattern of extension workers.

The findings of this study will provide an idea about the mode of communication used by the extension workers to communicate with the immediate superiors in the organization and farmers. It also helps the administrators to plan and then to provide suitable facilities to evolve appropriate policies for effective communication. The results of this investigation may also help to select the extension worker for the sugar industries.

Limitations of the study:

No human effort is free from limitations. This study is no exception. This study is a single researcher investigation undertaken as a part of the requirement for the doctoral degree programme. The constraints of time and
resources restricted the comprehensive and in-depth study. The restricted sample size, although it is within the framework of standard sampling procedure. Because the study is completely based on the expressed opinions of the respondents, it may contain their personal bias and prejudices though every care is taken to avoid this and make the study as objective as possible.

**Presentation of the study:**

The report of the study is presented in six chapters. The first chapter deals with the introduction, where in the statement of the problem, objectives, scope and limitations of the study are presented. The second covers the review of theories and related studies in the light of the present investigation. The third chapter relates to the details of the methodology used in the process of the investigation. Presentation of result and discussions in presented in the forth chapter. Chapter five indicate summary of the study followed by references and appendices.